WINTERGREEN RESEARCH, INC.

Natural Language Computer Assisted Coding and SOA Healthcare Application Market Strategies, Shares and Forecasts, Worldwide, 2010-2016

Medical Coding and SOA Middleware Provide Flexible, Responsive Healthcare Delivery

Picture by Susie Eustis

MOUNTAINS OF OPPORTUNITY

WinterGreen Research, Inc.
Lexington, Massachusetts www.wintergreenresearch.com

REPORT # SH24572315 650 PAGES 203 TABLES AND FIGURES 2010
$3,500 SINGLE COPY $7,000 WEB SITE POSTING

CHECK OUT THESE KEY TOPICS

COMPUTER ASSISTED CODING OF MEDICAL INFORMATION

CAC

ICD-10

ICD-9

NATURAL LANGUAGE CODING

NLC

COMPUTER ASSISTED CODING

SOA

Rules Based Coding Technology

Medical Coding

Medical Necessity

Electronic Medical Record

Electronic Medical Coding

NATURAL LANGUAGE SOLUTIONS

COMPUTERIZED MEDICAL WORKFLOW

CLAIMS SCRUBBERS

TESSI® (TERMINOLOGY SUPPORTED SEMANTIC INDEXING)

ELECTRONIC CODING FOR PHYSICIANS

MEDICAL NECESSITY

CORRECT CODING TOOLS

PHYSICIAN ELECTRONIC MEDICAL RECORD (EMR) SYSTEMS

LANGUAGE AND COMPUTING

ONTOLOGY ASSISTED SOLUTIONS

DIAGNOSIS CODES

PROCEDURE CODES

SERVICES ORIENTED ARCHITECTURE

REPORT # SH24572315 650 PAGES 203 TABLES AND FIGURES 2010

$3,500 SINGLE COPY $7,000 WEB SITE POSTING

SOA APPLICATION MIDDLEWARE
SOA FORECASTS
SOA MARKET SHARES
WEB SERVICES
SOA GOVERNANCE
SOA ESB
SOA REPOSITORY
SOA Directory
SOA Advances In Technology

Services Oriented Architecture (SOA) Flexible Applications Middleware SOA Management and Security

SOA Management
Monitor SOA
Manage SOA
Application Service Levels
SOA Business Process
SOA IT
SOA Flexible Response To Changing Market Conditions
Innovation For The Very Large Enterprises
SOA Innovation

OPPORTUNITY ABOUNDS

WinterGreen Research, Inc.
Lexington, Massachusetts
www.wintergreenresearch.com

REPORT # SH24572315 650 PAGES 203 TABLES AND FIGURES 2010
$3,500 SINGLE COPY $7,000 WEB SITE POSTING

WINTERGREEN RESEARCH

Natural Language Computer Assisted Coding and SOA Healthcare Application Market Strategies, Shares and Forecasts, Worldwide, 2010-2016

LEXINGTON, Massachusetts (October 15, 2010) – WinterGreen Research announces that it has a new study on: Natural Language Computer Assisted Coding and SOA Healthcare Application Market Strategies, Shares and Forecasts, Worldwide, 2010-2016. Computer assisted coding markets come together to make information technology delivery a system that supports the efficient and affordable patient treatment environment. CodeRyte is a vendor with advanced systems evolution. Other vendors are achieving ICD-10 capability

Computer assisted Coding represents a utility using SOA to manage web services and transport code modules from one application to another, from one facility to another. IBM is the market leader in SOA application middleware with 75% market share.

Coders identify diagnoses and related procedures. These events must have codes assigned to them for use in billing and performance measurement programs. Coders use one system to research medical codes and another to create encoded documents. Inefficiencies in medical coding add $8 billion in administrative costs to the health care system, result in billing and payment errors and slow payments to health care providers.

Computer assisted coding markets are merging with electronic patient record systems. The ability to code medical records depends on the ability to read the chart automatically, creating a need for the coding systems to be part of the electronic records systems. Automated coding of medical records provides significant efficiency to the healthcare delivery system.

Automated process is an essential aspect of business process efficiency. Computer assisted coding represents the most significant aspect of achieving insurance efficiency. At the same time quality of care delivery improves by a quantum amount.

Computer assisted coding of medical information uses natural language solutions to link the physician notes in an electronic patient record to the codes used for billing

REPORT # SH24572315 650 PAGES 203 TABLES AND FIGURES 2010
$3,500 SINGLE COPY $7,000 WEB SITE POSTING

Medicare, Medicaid, and private insurance companies. Natural language is used determine the links to codes.

80% of the coding can occur automatically without properly designed natural language processing (NLP) solutions do not require physicians to change the way they work. They can dictate in a free flowing fashion, consistent with the way they think, and are not limited to structured inputs that may or may not fully capture the unique circumstances of each patient encounter.

Matching codes generated from physician notes to standard treatment protocols promises to improve health care delivery. Accompanying the more advanced computer generated types of physician patient management coding with measures of best practice promises to revolutionize health care delivery.

The ability to further check as to whether the recommendations for follow up made by radiologists and matching the recommendations with the actual follow up holds significant promise of vastly improved health care delivery.

Systems are implemented with natural language pattern recognition. These patterns are linked to rules and encoded with systems that learn from their mistakes, creating self healing adjustments to how a particular physician works. In order to assign appropriate billing codes based on the language, the context in which those patterns of language occur is buttressed with statistical analysis and rules developed at the outset of using a system.

The Centers for Medicare & Medicaid Services (CMS) requires all health care organizations to use the Statistical Classification of Disease and Related Health Problems (ICD-10) when encoding medical documentation by October 1, 2013. ICD-10 is a sophisticated index of more than 155,000 codes that describe medical conditions and their severity. It will replace ICD-9, which had just 17,000 codes.

According to CMS, ICD-10 will facilitate better analysis of disease patterns, severity and treatment outcomes, and support health care quality improvement efforts. vastly expanded code sets increase the time required to process documentation and the potential for errors, which lead to rejected claims and higher administrative costs.

Markets at $150 million in 2010 are anticipated to reach $2.6 billion by 2016. This growth comes as the electronic patient record is adopted worldwide and as automated process works in combination with sophisticated medical testing and imaging to provide superior, and less expensive healthcare delivery.

Medical testing speeds diagnosis and exposes treatment options faster. Testing is far less expensive than physician and clinician labor. The ability to wring the labor costs out of the healthcare delivery system is what brings efficiency from automated process. This is not so good for the jobs market, but it does vastly improve healthcare delivery.

SOA supports on demand systems providing scale to meet the needs of users. As cloud markets evolve and users only pay for the capacity they use., SOA becomes a significant aspect of all markets going forward. SOA strategies relate to providing a middleware to manage different application access in ways that position software with a more flexible capability. The 2010 SOA study has 650 pages, 206 tables and figures.

The popularity of the on-demand deployment model has increased significantly. Systems provide security, response time, and service availability. SaaS software as a service application is widely known by the salesforce.com computing model illustrates. Business applications and computing models have matured and adoption has become an issue for every IT department. Platform as a service (PaaS) and infrastructure as a service (IaaS) have joined SaaS as compelling aspects of cloud computing applications and infrastructure services.

Keywords:, Computer Assisted Coding Of Medical Information,Cac,Icd-10,Icd-9,Natural Language Coding ,Nlc,Computer Assisted Coding ,Soa,Rules Based Coding Technology,Medical Coding,Medical Necessity ,Electronic Medical Record,Electronic Medical Coding ,Natural Language Solutions,Computerized Medical Workflow ,Claims Scrubbers,Tessi® (Terminology Supported Semantic Indexing),Electronic Coding For Physicians,Medical Necessity,Correct Coding Tools,Physician Electronic Medical Record (Emr) Systems,Language And Computing,Ontology Assisted Solutions,Diagnosis Codes,Procedure Codes,Services Oriented Architecture ,Soa Application Middleware,Soa Forecasts,Soa Market Shares,Web Services,Soa Governance,Soa Esb,Soa Repository,Soa Directory,Soa Advances In Technology,Services Oriented Architecture (Soa) Flexible Applications Middleware Soa Management And Security,Soa Management,Monitor Soa ,Manage Soa ,Application Service Levels,Soa Business Process ,Soa It,Soa Flexible Response To Changing Market Conditions,Innovation For The Very Large Enterprises,SOA Innovation,Services Oriented Architecture,Soa Application Middleware,Soa Forecasts, Soa Market Shares, Web Services, Soa Governance, Soa Esb, Soa Repository, Soa Directory, Soa Advances In Technology, Services Oriented Architecture (Soa) Flexible Infrastructure Soa Management And Security, Soa Management, Monitor Soa , Manage Soa , Application Service Levels, Soa Business Process , Soa It, Soa Flexible Response To Changing Market Conditions, Innovation For The Very Large Enterprises, Soa Innovation

Natural Language Computer Assisted Coding and SOA Healthcare Application Market Strategies, Shares and Forecasts, Worldwide, 2010-2016

Computer Assisted Coding (CAC) and SOA Market Leaders

UnitedHealth / Ingenix / A-Life
CodeRyte
3M
Cerner
Platocode
UnitedHealth Group
UnitedHealth Group Ingenex / HSS
IBM

Computer Assisted Coding (CAC)Market Participants

Computer Assisted Coding (CAC) Company Profiles

Allscripts
APP RHIOnet
Artificial Medical Intelligence, Inc.
BayScribe
Cerner
CodeNet Inc.
CranWare
Dolbey Fusion CAC(TM)
Dolbey Dictation, Transcription, Speech
Healthcare Systems Integration Engine HCnet®
IBM Open-Source Endeavor
IBM WebSphere

REPORT # SH24572315 650 PAGES 203 TABLES AND FIGURES 2010

$3,500 SINGLE COPY $7,000 WEB SITE POSTING

Language & Computing
MedQuist and Artificial Medical Intelligence Partner
MDS Medical Software
MDS Medical
MedQuist
MedScribe Information Systems Inc.
Med Scribe
Meta Health Technology
M-Modal
MED2020
New Wave Software
Peak HealthCare Solutions, Inc.
Picis / LYNX Medical Systems
Precyse Solutions
QuadraMed
Radiology Business Management
Sentara Healthcare
TruCode
UnitedHealth Group / Ingenix
Ingenix Innovations
UnitedHealth Group Ingenex / HSS
American Academy of Professional Coders (AAPC)
America's Health Insurance Plans
American Association of Preferred Provider Organizations
APHSA – American Public Human Services Association
basys
CaseNet
Connecture
Delmar, Cengage Learning
DST
FACTS® Services, Inc.
FutureVision Technologies
IBM
ITAA – Information Technology Association of American
The Managed Care Executive Group
MphasiS
NCQA
NASCIO
NASP
NaviMedix

Silverlink
The Coding Network
TDWI – The Data Warehousing Institute
The TriZetto Group, Inc.
Ingenix Solves Problems In Health Care
Ingenix wholly-owned subsidiary of UnitedHealth Group
Zotec Partners
Selected Computer Assisted Coding Vendors
3M Health Information Systems
Allshred Services
Amphion Medical Solutions
Cardone Record Services
Certified Document Destruction
Cintas Document Management
CodeRyte
Complete Coding Solutions
Cranel
CPSI
CTech
DataBank
DeVry University
Diskriter
Dolbey
EDCO Group
Fireproof Records Center
First Choice Medical Transcription Service
FormFast
Fujitsu Computer Products
FutureNet Technologies
Golden Isles Medical Transcription
HealthPort
Heartland Information Services
HIMentors
InfraWare
Ingenix
iod incorprated
Iron Mountain, Inc.
JLG Medical Transcription Services
Keystrokes Transcription Services
KIWI-TEK

Laguna Medical Systems
LMS' ACCUTREND
LexiCode Corporation
Master of Business Operational Excellence
Maxim Health Information Services
McKesson Corporation
Medical Learning
Medical Transcription Corporation
MedPlus, Inc.
MedQuist
MedScribe Information Systems
Meta Health Technology
Micro Star
MicroImage
Modern Office Methods
MRO Corporation
NetWorks Group
New England Medical Transcription. Inc.
Nuance
OfficeTeam Healthcare Group
Owens Community College
Peak Health Solution
Perry Johnson & Associates
Precyse Solutions
ProTec Solutions
Quality Management Consulting Group, Ltd.
RealMed
Rehabilitation Services Commission
RRS Release of Information Service
Shred-it
SOAP Transcription Services
SoftScript (
SPi Healthcare
Stat Solutions
Streamline Health
College of St. Scholastica
Transcend Services
UnicorMed
United Audit Systems
University of Cincinnati-ONLINE

Visionary HealthWare
Zodiac Transcription Service

Natural Language Computer Assisted Coding and SOA Healthcare Application Market Strategies, Shares and Forecasts, Worldwide, 2010-2016

Report Methodology

This is the 457th report in a series of primary market research reports that provide forecasts in solar energy, robots, communications, telecommunications, the Internet, computer, software, telephone equipment, health equipment, and batteries to store energy. Automated process and significant growth potential are a priorities in topic selection. The project leaders take direct responsibility for writing and preparing each report. They have significant experience preparing industry studies. Forecasts are based on primary research and proprietary data bases.

The primary research is conducted by talking to customers, distributors and companies. The survey data is not enough to make accurate assessment of market size, so WinterGreen Research looks at the value of shipments and the average price to achieve market assessments. Our track record in achieving accuracy is unsurpassed in the industry. We are known for being able to develop accurate market shares and projections. This is our specialty.

The analyst process is concentrated on getting good market numbers. This process involves looking at the markets from several different perspectives, including vendor shipments. The interview process is an essential aspect as well. We do have a lot of granular analysis of the different shipments by vendor in the study and addenda prepared after the study was published if that is appropriate.

Forecasts reflect analysis of the market trends in the segment and related segments. Unit and dollar shipments are analyzed through consideration of dollar volume of each market participant in the segment. Installed base analysis and unit analysis is based on interviews and an information search. Market share analysis includes conversations with key customers of products, industry segment leaders, marketing directors, distributors, leading market participants, opinion leaders, and companies seeking to develop measurable market share.

Over 200 in depth interviews are conducted for each report with a broad range of key participants and industry leaders in the market segment. We establish accurate market forecasts based on economic and market conditions as a base. Use input/output ratios, flow charts, and other economic methods to quantify data. Use in-house analysts who meet stringent quality standards. Interviewing key industry participants, experts and end-users is a central part of the study. Our research includes access to large proprietary databases. Literature search includes analysis of trade publications, government reports, and corporate literature.

Findings and conclusions of this report are based on information gathered from industry sources, including manufacturers, distributors, partners, opinion leaders, and users. Interview data was combined with information gathered through an extensive review of internet and printed sources such as trade publications, trade associations, company literature, and online databases. The projections contained in this report are checked from top down and bottom up analysis to be sure there is congruence from that perspective.

The base year for analysis and projection is 2009. With 2009 and several years prior to that as a baseline, market projections were developed for 2010 through 2016. These projections are based on a combination of a consensus among the opinion leader contacts interviewed combined with understanding of the key market drivers and their impact from a historical and analytical perspective. The analytical methodologies used to generate the market estimates are based on penetration analyses, similar market analyses, and delta calculations to supplement independent and dependent variable analysis. All analyses are displaying selected descriptions of products and services.

This research includes referencde to an ROI model that is part of a series that provides IT systems financial planners access to information that supports analysis of all the numbers that impact management of a product launch or large and complex data center. The methodology used in the models relates to having a sophisticated analytical technique for understanding the impact of workload on processor consumption and cost.

WinterGreen Research has looked at the metrics and independent research to develop assumptions that reflect the actual anticipated usage and cost of systems. Comparative analyses reflect the input of these values into models.

The variables and assumptions provided in the market research study and the ROI models are based on extensive experience in providing research to large enterprise organizations and data centers. The ROI models have lists of servers from different manufacturers, Systems z models from IBM, and labor costs by category around the world. This information has been developed from WinterGreen research proprietary data bases constructed as a result of preparing market research studies that address the software, energy, healthcare, telecommunicatons, and hardware businesses.

YOU MUST HAVE THIS STUDY

Natural Language Computer Assisted Coding and SOA Healthcare Application Market Strategies, Shares and Forecasts, Worldwide, 2010-2016

Table of Contents

Computer Assisted Coding Executive Summary

Computer Assisted Coding Market Description And Market Dynamics

Computer Assisted Coding and SOA Market Shares And Market Forecasts

Computer Assisted Coding Product Description

REPORT # SH24572315 650 PAGES 203 TABLES AND FIGURES 2010

$3,500 SINGLE COPY $7,000 WEB SITE POSTING

Computer Assisted Coding Technology

Computer Assisted Coding Company Profiles

List of Tables and Figures

Computer Assisted Coding Executive Summary

Computer Assisted Coding Market Description And Market Dynamics

Computer Assisted Coding Market Shares and Market Forecasts

Computer Assisted Coding Product Description

Computer Assisted Coding Technology

Computer Assisted Coding Company Profiles

ABOUT THE COMPANY

WINTERGREEN RESEARCH, RESEARCH STRATEGY IDENTIFIES MARKET TRENDS THROUGH READING MARKET MATERIALS AND INTERVIEWING OPINION LEADERS. WINTERGREEN RESEARCH TEAM WORKS TO GATHER PRIMARY INFORMATION FROM COMPANY INTERVIEWS, INDUSTRY MATERIALS, AND COMPANY DOCUMENTS TO WRITE MARKET RESEARCH STUDIES FROM AN INDEPENDENT PERSPECTIVE. THE ABILITY, TO THINK ABOUT MARKET TRENDS IS ENHANCED BY DOING IT OVER AND OVER FOR MANY DIFFERENT MARKETS. THAT IS WHAT WINTERGREEN RESEARCH IS ALL ABOUT: READING AND THINKING IS AN ESSENTIAL ASPECT OF COMPETITIVE ANALYSIS. TALKING TO OPINION LEADERS IS AN ESSENTIAL ASPECT OF PRODUCING GOOD, RELIABLE, INDEPENDENT DATA.

BY READING THE ELECTRONIC EQUIVALENT OF 40 FEET OF PAPER FOR EACH STUDY, WINTERGREEN RESEARCH SENIOR ANALYSTS CAN LEARN A LOT MORE ABOUT MARKETS. IDENTIFICATION OF MARKET TRENDS IS A HIGH PRIORITY AT WINTERGREEN RESEARCH. AS WITH THE VALUE PROPOSITION FOR COMPETITIVE ANALYSIS COMING FROM GETTING PRIMARY INPUT FROM A RANGE OF INDUSTRY PARTICIPANTS AND OBSERVERS.

WINTERGREEN RESEARCH, FOUNDED IN 1985, PROVIDES STRATEGIC MARKET ASSESSMENTS IN TELECOMMUNICATIONS, COMMUNICATIONS EQUIPMENT, HEALTH CARE, INTERNET AND ADVANCED COMPUTER TECHNOLOGY. INDUSTRY REPORTS FOCUS ON OPPORTUNITIES THAT EXPAND EXISTING MARKETS OR DEVELOP MAJOR NEW MARKETS. THE REPORTS ASSESS NEW PRODUCT AND SERVICE POSITIONING STRATEGIES, NEW AND EVOLVING TECHNOLOGIES, AND TECHNOLOGICAL IMPACT ON PRODUCTS, SERVICES, AND MARKETS. MARKET SHARES ARE PROVIDED. LEADING MARKET PARTICIPANTS ARE PROFILED, AND THEIR MARKETING STRATEGIES, ACQUISITIONS, AND STRATEGIC ALLIANCES ARE DISCUSSED. THE PRINCIPALS OF WINTERGREEN RESEARCH HAVE BEEN INVOLVED IN ANALYSIS AND FORECASTING OF INTERNATIONAL BUSINESS OPPORTUNITIES IN TELECOMMUNICATIONS AND ADVANCED COMPUTER TECHNOLOGY MARKETS FOR OVER 30 YEARS.

ABOUT THE PRINCIPAL AUTHORS

ELLEN T. CURTISS, TECHNICAL DIRECTOR, CO-FOUNDER OF WINTERGREEN RESEARCH, CONDUCTS STRATEGIC AND MARKET ASSESSMENTS IN TECHNOLOGY-BASED INDUSTRIES. PREVIOUSLY SHE WAS A MEMBER OF THE STAFF OF ARTHUR D. LITTLE, INC., FOR 23 YEARS, MOST RECENTLY AS VICE PRESIDENT OF ARTHUR D. LITTLE DECISION RESOURCES, SPECIALIZING IN STRATEGIC PLANNING AND MARKET DEVELOPMENT SERVICES. SHE IS A GRADUATE OF BOSTON UNIVERSITY AND THE PROGRAM FOR MANAGEMENT DEVELOPMENT AT HARVARD GRADUATE SCHOOL OF BUSINESS ADMINISTRATION. SHE IS THE AUTHOR OF RECENT STUDIES ON WORLDWIDE TELECOMMUNICATIONS MARKETS, THE TOP TEN INTERNET EQUIPMENT COMPANIES, THE TOP TEN CONTRACT MANUFACTURING COMPANIES, AND THE TOP TEN TELECOMMUNICATIONS MARKET ANALYSIS AND FORECASTS.

SUSAN EUSTIS, PRESIDENT, CO-FOUNDER OF WINTERGREEN RESEARCH, HAS DONE RESEARCH IN COMMUNICATIONS AND COMPUTER MARKETS AND APPLICATIONS. SHE HOLDS SEVERAL PATENTS IN MICROCOMPUTING AND PARALLEL PROCESSING. SHE HAS THE ORIGINAL PATENTS IN ELECTRONIC VOTING MACHINES. SHE HAS NEW PATENT APPLICATIONS IN FORMAT VARYING, MULITPROCESSING, AND ELECTRONIC VOTING. SHE IS THE AUTHOR OF RECENT STUDIES OF THE SERVICES ORIENTED ARCHITECTURE, CONTENT MANAGEMENT, MID SIZE BUSINESS MIDDLEWARE, WORLDWIDE ENERGY MARKETS, SOLAR UTILITY MARKETS, SOLAR TECHNOLOGY MARKETS, THIN FILM BATTERY MARKETS, WEBCAM MARKETS, REGIONAL BELL OPERATING COMPANIES' MARKETING STRATEGIES, INTERNET EQUIPMENT, BIOMETRICS, A STUDY OF INTERNET EQUIPMENT, WORLDWIDE TELECOMMUNICATIONS EQUIPMENT, TOP TEN TELECOMMUNICATIONS, DIGITAL LOOP CARRIER, WEB HOSTING, WEB SERVICES, NANOTECHNOLOGY, AND APPLICATION INTEGRATION MARKETS. MS. EUSTIS IS A GRADUATE OF BARNARD COLLEGE.

ORDER FORM

Return To: **WinterGreen Research, Inc.**
6 Raymond Street
Lexington, MA 02421 USA
Phone: (781) 863-5078 --- Fax: (781) 863-1235 or (781) 860-0897

PLEASE ENTER MY ORDER FOR:

Natural Language Computer Assisted Coding and SOA Healthcare Application Market Strategies, Shares and Forecasts, Worldwide, 2010-2016

-ALL REPORTS ARE AVAILABLE IN EITHER PRINT OR PDF-

__________PDF _________PRINT

____ENCLOSED IS MY CHECK FOR $3,500 FOR SINGLE COPY, $7,000 FOR WEB SITE POSTING

____PLEASE BILL MY COMPANY USING P.O. NUMBER________________________________

____PLEASE CHARGE MY MASTERCARD/VISA/AMERICAN EXPRESS—

CARD NUMBER ____________________________EXP. DATE_______________

If charging to a Credit card you may e-mail the order form, but not the card information

Fax or Call with credit card information - Do not send card number as e-mail - You may send the order as e-mail or using the Web site shopping cart.

NAME___________________________________TITLE___________________________________

SIGNATURE____

COMPANY________________________________DIVISION_______________________________

ADDRESS_________________________________

CITY____________________________________STATE / ZIP______________________________

TELEPHONE_______________________________

FAX_________________________________

EMAIL_________________________________

PLEASE NOTE: RESIDENTS OF MASSACHUSETTS AND CONNECTICUT MUST INCLUDE APPROPRIATE SALES TAX

SUBSCRIBERS OUTSIDE THE UNITED STATES MUST PROVIDE PREPAYMENT IN U.S. FUNDS

REPORT # SH24572315 650 PAGES 203 TABLES AND FIGURES 2010

$3,500 SINGLE COPY $7,000 WEB SITE POSTING

WINTERGREEN RESEARCH